



Lead Poisoning Data Brief



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Childhood Lead Poisoning in the City of St. Louis

In 2003, Mayor Francis G. Slay introduced the “Comprehensive Action Plan to Eliminate Childhood Lead Poisoning in St. Louis”. This plan focuses on prevention of childhood lead poisoning. Since its introduction, the rate of childhood lead poisoning has decreased over 82 percent. Additionally, there has been a decline every year since 2003, with an average annual decrease of 13 percent.

Every year, the City of St. Louis Department of Health (DOH) receives data on every child under the age of six that was tested for lead poisoning the previous year. That data is then analyzed by several variables: race, gender, age, geography, among others.

Public Health Concern

Lead poisoning can affect nearly every system in the body. It can cause learning disabilities, behavioral problems, and at very high levels, seizures, coma, and even death. It is also difficult to detect without a blood test. Rarely are symptoms evident, even at high levels.

2014 is the most recent year for which the City has final data from the Missouri State Department of Health. In 2014, 12,244 children under the age of six were screened for lead poisoning. The vast majority (91%) were not lead poisoned. However, 9 percent did have blood lead levels above 5 micrograms per deciliter (the CDC’s threshold). It is important to point out that in 2012 the CDC changed their lead poisoning level from 10 micrograms to 5 micrograms. Using the original standard of 10 micrograms, 1.6 percent of children were lead poisoned.

There are approximately 25,000 children under the age of six in the City of St. Louis. A screening rate of almost 50% in 2014, while much higher than most other parts of the country, indicates that parents and private providers are still failing to screen children for lead poisoning in the City of St. Louis. Even though the prevalence of CLP appears to be declining, not enough is known about whether the entire high-risk population is being reached. It is very important that all children under the age of six are screened annually.

Key Findings

- Overall, 9.2 percent of children under age six had elevated levels of lead in the blood.
- Geographically, lead poisoning varies widely; some city neighborhoods have rates around 20 percent of children screened, while several neighborhoods had zero cases of childhood lead poisoning.
- Males had a lead poisoning rate of 10.2% while females had a rate of 8.3%.
- 2 year olds had the highest rate of lead poisoning (12%), followed by 1 year olds (10%). Children under age 1 had the lowest rate (2%).
- Summer saw the highest rates of lead poisoning (10.3%), while winter had the lowest rates (7.9%)

Childhood Lead Poisoning by Census Tract, 2014

